SUBCHAPTER A : MONITORING AND REPORTING REQUIREMENTS

§319.1. Monitoring and Reporting Requirements.

All holders of waste discharge permits are required to periodically report the status of their compliance with the terms and conditions of their permits and with other relevant statutes in a manner approved by the executive director. The report shall contain results of flow measurements and results of analyses of samples taken, or the equivalent information determined by methods approved by the executive director. The status of all requirements of the permit shall be reported. The report may contain such other information concerning the discharges covered by the permit as the executive director may reasonably prescribe in order to establish a system for monitoring the quantity and quality of waste discharged into or adjacent to any water in the state and for monitoring the quality of any water in the state.

§319.2. Exclusions.

Unless otherwise specified in the permit or otherwise ordered by the commission, land disposal or evaporation facilities shall be excluded from the reporting procedure. The commission may exempt other permittees from reporting requirements on a case-by-case basis provided that the permitted facility shall not directly or indirectly affect the quality of water in the state. Such exclusion shall be set forth in the permit. An exclusion from the reporting procedure, however, does not relieve a permittee from monitoring and record keeping requirements.

§319.3. Prior Permit Reporting Requirements.

The holders of permits issued prior to December 19, 1969, which require or establish a specific reporting procedure, shall continue to report in accordance with that procedure until receipt of reporting forms developed by the executive director or until otherwise notified by the executive director.

§319.4. Parameters To Be Monitored.

Each permittee will be required to monitor, on a regular basis, each parameter included in its permit which is also included on its commission "Monthly Effluent Report" form. Each permittee may also be required to monitor any other parameter(s) the executive director may reasonably deem necessary to adequately monitor the quality or quantity of any discharge. If the analysis of additional parameters is required, the permittee shall be provided written notification prior to the initiation of the requirement.

§319.5. Required Sampling Location and Frequency of Analysis or Measurement.

(a) Required samples and measurements shall be taken of the effluent from the sampling point described in the permit. Should the permit not specify a sampling point, samples shall be collected immediately following the last treatment unit. These procedures shall be followed unless an alternate

sampling and/or measuring point is approved in advance in writing by the executive director or his designee.

(b) Samples shall be taken and measurements shall be made at the minimum frequencies specified in the permit for each parameter. If a permit does not specify a sampling frequency, the permittee shall follow the frequencies set forth in Tables 1 and 2 in §319.9 of this title (relating to Self-Monitoring and Quality Assurance Schedules), basing the frequency of analysis on the currently applicable permitted average daily flow. Table 1 shall be applicable to treated domestic sewage effluent while Table 2 shall be applicable to all other wastewater effluents. If a parameter included in a permit is not listed in the applicable table, the permittee will be instructed by the executive director in writing as to what frequency of analysis shall be followed.

(c) The permit may specify different sampling and/or measurement frequencies than specified in Table 1 or Table 2 of §319.9 of this title (relating to Self-Monitoring and Quality Assurance Schedules) on a case-by-case basis, and in such cases the permit controls.

(d) For land disposal or evaporation facilities, the monitoring requirements shall be specified in the permit. The permittee shall monitor flow to a land treatment site on a daily basis and an evaporation system on a weekly basis when utilized. The specific plot or site used for land treatment shall be specified in the permit by name or description.

(e) The monitoring requirements set out in this subchapter are minimum requirements unless the permit specifies a lesser frequency. Additional measurements, samples, analyses, and recordation are encouraged in order to facilitate more effective management and control of facility operations. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified in §319.11 of this title (relating to Sampling and Laboratory Testing Methods), at a minimum, the results of such monitoring that indicate permit noncompliance shall be included in the calculation and reporting of the value submitted on the required monthly effluent report. The permittee may report results of such monitoring that indicate permit compliance. Increased frequency of sampling shall be indicated on the report.

(f) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

§319.6. Quality Assurance.

The permittee shall assure the quality of all measurements through the use of blanks, standards, duplicate analyses, and spikes. At a minimum, the quality assurance requirements specified in Table 3 in §319.9 of this title (relating to Self-Monitoring and Quality Assurance Schedules) shall be utilized.

§319.7. Documentation of Monitoring Activities.

(a) For each measurement or sample taken pursuant to the monitoring requirements of this chapter, the permittee shall maintain records of the following information:

(1) the exact place, date, and time of sample collection or measurement;

(2) the dates the analyses were performed;

(3) the identity of person(s) who collected the samples or made the measurements and the identity of person(s) and laboratory who performed the analyses;

(4) the results of all required analyses or measurements; and

(5) the technique or method of analysis including the results of adequate verifications of analytical precision and/or accuracy verified by means of the recommended guidelines in the Environmental Protection Agency manual entitled "Handbook for Analytical Quality Control in Water and Wastewater Laboratories," which are to be determined on the day the analyses are performed. The permittee shall meet the quality control requirements specified in Table 3.

(b) The permittee shall be subject to routine inspection of its compliance with subsection (a) of this section.

(c) All records and information resulting from the required monitoring activities, including but not limited to, all records concerning measurements and analyses performed and concerning calibration and maintenance of flow measurement and other instrumentation, shall be retained for a minimum of three years, or for a longer period if requested by the executive director or his designee.

(d) Unless otherwise specified in the permit, a monthly effluent report must be submitted each month by the 20th day of the following month for each discharge which is described in the permit whether or not a discharge is made for that month.

(e) Knowingly making any false statement on any report may result in the imposition of criminal and/or civil penalties as provided by state law.

§319.8. Required Signatures for Effluent Reports.

Each effluent report shall contain two signatures. One signature must be that of the superintendent of the wastewater treatment facility or other person occupying a similar position associated with the operation of the treatment facility. The other signature shall be one from the following.

(1) If submitted by a public entity, a state or federal agency, or a corporation, the report should be signed by a principal executive officer, ranking elected official, commanding officer, or other employee duly authorized by the principal executive officer.

(2) If submitted by a partnership, the report should be signed by a general partner.

(3) If submitted by a sole proprietor, the report should be signed by the proprietor.

§319.9. Self-Monitoring and Quality Assurance Schedules.

(a) The following table sets forth the self-monitoring schedules applicable to treated domestic sewage effluent.

Table 1
FREQUENCY OF MEASUREMENT

Design Capacity MGD	Flow	BOD_5	Total Suspended Solids	Chlorine Residual	pH	Collecting of Samples and Taking Measurements
0 to less than 0.10	One instantaneous measurement each working day but not less than five measurements per week (b) (c)	One each week	One each week	One each working day but not less than five measurements per week (c)	One each month	The laboratory tests shall be made on a grab sample collected at peak loading periods, and flow measurements shall be taken concurrently with such grab samples. (d)
0.10 to less than 0.50	One instantaneous measurement each working day but not less than five measurements per week (b) (c)	One each week	One each week	One each working day but not less than five measurements per week (c)	One each month	The laboratory tests shall be made on a grab sample collected at peak loading periods, and flow measurements shall be taken concurrently with such grab samples. (d)
0.50 to less than 1.00	The daily flow measured by a totalizing meter	One each week	One each week	One each day of the week	Two each month	The laboratory test excepting the pH and chorine residual test which are performed on grab samples or insitu shall be made on a composite sample proportioned according to flow, made up of three portions collected no closer together than 2 hours and with the first sample collected no earlier than 10:00 a.m.
1.00 to less than 5.00	The daily flow measured by a totalizing meter	Two each week	Two each week	One each day of the week	One each week	The laboratory test excepting the pH and chlorine residual test which are performed on grab sample or insitu shall be made on a composite sample proportioned according to flow, made up of six portions collected no closer together than 2 hours and with the first sample collected no earlier than 10:00 a.m.
5.00 to less than 10.00	The daily flow measured by a totalizing meter	One each weekday (a)	One each weekday (a)	One each day of the week	One each weekday	The laboratory test excepting the pH and chlorine residual test which are performed on grab samples or insitu shall be made on (a) 24-hr. composite samples proportioned according to flow collected no closer together than 2 hours in 12 individual portions.
10.00 or greater	The daily flow measured by totalizing meter	One each day of the week	One each day of the week	One each day of the week	One each day of the week	The laboratory test excepting the pH and the chlorine residual test which are performed on grab samples or insitu shall be made on 24-hour composite samples proportioned according to flow collected no closer together than 2 hours in 12 individual portions.

(a) Weekday - Monday thru Friday
(b) Where a totalizing meter is provided, the actual volume of water which has been processed each day should be determined and reported.
(c) Working Day - A day when the plant is visited for routine work.
(d) Peak loading period - That time during the calendar day when the maximum flow rate is experienced within the facility.
(e) Flow - Determined by actual measurement of effluent flow or determined by calculation based upon influent measurement unless effluent flow is specified in the permit.
NOTE: See 31 TAC §319.5(e) concerning additional measurements and documentation.

(b) The following table sets forth the self-monitoring schedules applicable to non-domestic wastewater effluent.

Table 2

FREQUENCY OF MEASUREMENT
VOLUME OF MGD

Parameter Flow	**0 to less than 0.05**	**0.50 to less than 0.50**	**0.50 to less than 2.00**	**2.00 to less than 10.00**	**10.00 or greater**
	One instantaneous measurement per operating day except on sample days when 3 instantaneous measurements made concurrently with the collection of sample portions are required.	One instantaneous measurement per operating shift - on sample days concurrent with the collection of a sample portion.	One instantaneous measurement per operating shift - on sample days concurrent with the collection of a sample portion or the reading from a totalizing flow meter.	Six instantaneous measurements per day spaced at equal intervals during the operating period or the reading from a totalizing flow meter.	Instantaneous measurements made each operating hour or the reading from a totalizing flow meter.
pH (a)	1 per day	1 per day	1 per day	1 per day	1 per day
Temperature (b)	1 per day	3 per day	3 per day	6 per day	12 per day
BOD	1 per week	2 each week	2 each week	3 each week	1 per day
COD	1 per week	2 each week	2 each week	3 each week	1 per day
TOC	1 per week	2 each week	2 each week	3 each week	1 per day
Oil & Grease (c)	1 per week	2 each week	2 each week	3 each week	1 per day
Ammonia Nitrogen	1 per week	2 each week	2 each week	3 each week	1 per day
Arsenic	1 per week	2 each week	2 each week	3 each week	1 per day
barium	1 per week	2 each week	2 each week	3 each week	1 per day
Boron	1 per week	2 each week	2 each week	3 each week	1 per day
Cadmium	1 per week	2 each week	2 each week	3 each week	1 per day
Chromium	1 per week	2 each week	2 each week	3 each week	1 per day
Copper	1 per week	2 each week	2 each week	3 each week	1 per day
Lead	1 per week	2 each week	2 each week	3 each week	1 per day
Manganese	1 per week	2 each week	2 each week	3 each week	1 per day
Mercury	1 per week	2 each week	2 each week	3 each week	1 per day

Parameter Flow	**0 to less than 0.05**	**0.50 to less than 0.50**	**0.50 to less than 2.00**	**2.00 to less than 10.00**	**10.00 or greater**
Nickel	1 per week	2 each week	2 each week	3 each week	1 per day
Selenium	1 per week	2 each week	2 each week	3 each week	1 per day
Silver	1 per week	2 each week	2 each week	3 each week	1 per day
Zinc	1 per week	2 each week	2 each week	3 each week	1 per day
TSS	1 per week	2 each week	2 each week	3 each week	1 per day
TDS	1 per week	2 each week	2 each week	3 each week	1 per day
Chloride	1 per week	2 each week	2 each week	3 each week	1 per day
Sulphate	1 per week	2 each week	2 each week	3 each week	1 per day
Nitrate Nitrogen	1 per week	2 each week	2 each week	3 each week	1 per day
Sulfide (c)	1 per week	2 each week	2 each week	3 each week	1 per day
Phenol (c)	1 per week	2 each week	2 each week	3 each week	1 per day
Collection of Samples	Samples shall be composite samples made up of three portions, sized proportional to flow, collected to no closer together than one hour and over a span of time not exceeding 24 hours.	Samples shall be composite samples made up of three portions, sized proportional to flow, one portion being collected during each operating shift or otherwise suitably distributed throughout the day.	Samples shall be composite samples made up of three portions, sized proportional to flow, one portion being collected during each operating shift or otherwise suitably distributed throughout the operating day.	Samples shall be composite samples made up of six portions, sized proportional to flow, collected concurrently with the instantaneous flow measurements made during a 24 hour time span.	Samples shall be 24 hour composite samples collected in 12 or more individual portions, sized proportional to flow, equally spaced throughout the operating day.

(a) The required laboratory tests shall be made on grab samples and analyzed immediately after collection or analyzed in situ at the sampling point.
(b) The temperature shall be measured in situ on the water at the permit sampling point.
(c) The required laboratory tests shall be made on grab samples.

(c) The following table sets forth the quality assurance requirements for wastewater analyses.

Table 3
REQUIRED QUALITY CONTROL ANALYSES

Parameter	Blank	Standard	Duplicate	Spike
Bacterial	A		B	
Alkalinity		A	B	
Ammonia Nitrogen	A	A	B	B
BOD	A	A	B	
BOD-carbonaceous	A	A	B	
COD	A	A	B	B
Chloride	A	A	B	B
Chlorine-Total or Free		D		
Cyanide-Total or Amenable to Chlorination	A	A	B	B
Fluoride	A	A	B	B
pH		C		
Kjeldahl Nitrogen	A	A	B	B
Metals (all)	A	A	B	B
Nitrate Nitrogen	A	A	B	B
Nitrite Nitrogen	A	A	B	B
Oil & Grease	A	D		
Orthophosphate	A	A	B	B
Oxygen (dissolved)		A	B	
Phenols	A	A	B	
Phosphorus-Total	A	A	B	B
Specific Conductance	A	A		
Sulfate	A	A	B	B
Sulfide	A	A	B	
Sulfite	A	A	B	
TOC	A	A	B	B
TSS	A		B	
TDS	A	A	B	
Organics by GC or GC/MS	A	A	E	E

A - Wherever specified, at least one blank and one standard shall be performed each day that samples are analyzed.

B - Wherever specified, duplicate and spike analyses shall be performed on a 10% basis each day that samples are analyzed. If one to 10 samples are analyzed on a particular day, then one duplicate and one spike analyses shall be performed.

C - For pH analysis, the meter shall be calibrated each day that samples are analyzed using a minimum of two standards which bracket the pH value(s) of the sample(s).

D - For the oil and grease analysis and chlorine-total or free analysis, standards shall be analyzed on a 10% basis. If one to 10 samples are analyzed on a particular day, then one standard shall be analyzed. Duplicates may be analyzed in lieu of standards for the oil and grease analysis and chlorine-total or free analysis.

E - For GC and GC/MS analyses, duplicate and spike analyses shall be performed on a 5% basis. If one to 20 samples are analyzed in a month, then one duplicate and one spike analyses per month shall be performed.

§319.10. Fecal Coliform Requirements.

The commission may impose disinfection in accordance with §309.3(g) of this title (relating to Application of Effluent Sets), fecal coliform concentration, or total coliform concentration requirements for domestic wastewater discharges on a case-by-case basis in order to maintain and enhance water quality and associated public health needs.

§319.11. Sampling and Laboratory Testing Methods.

(a) All sample collection shall be conducted according to recommendations found in the latest edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation), or the Environmental Protection Agency manual entitled "Methods for Chemical Analysis of Water and Wastes" (1979), or the Environmental Protection Agency manual entitled "Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents" (1973).

(b) Sample containers, holding times, preservation methods and the physical, chemical and microbiological and analyses of effluents shall meet the requirements specified in regulations published in the 40 Code of Federal Regulations Part 136 pursuant to the Federal Water Pollution Control Act, §304(g), and be conducted according to this federal regulation or the latest edition of "Standard Methods for the Examination of Water and Wastewater."

(c) Flow measurements, equipment, installation, and procedures shall conform to those prescribed in the "Water Measurement Manual," United States Department of the Interior Bureau of Reclamation, Washington, D.C., or methods that are equivalent as approved by the executive director.

(d) Laboratories shall routinely use and document intralaboratory quality control practices as recommended in the latest edition of the Environmental Protection Agency manual entitled "Handbook for Analytical Quality Control in Water and Wastewater Laboratories." These practices will include the use of internal quality control check samples.

(e) The sampling and laboratory facilities, data, and records of quality control are subject to periodic inspection by commission personnel. Should the procedures specified in this section not be suitable to any particular situation, nonstandard sampling and testing techniques may be employed in accordance with the procedures outlined in §319.12 of this title (relating to Alternate Sampling and Laboratory Testing Methods).

§319.12. Alternate Sampling and Laboratory Testing Methods.

(a) Should a permittee determine that the required standard sampling and testing techniques are not suited to its particular situation, the permittee shall make a written request for authorization to use alternate test procedures.

(1) Applications for alternate testing procedures will be made to the executive director.

(2) Items that shall be included with an application for alternate testing procedures are:

(A) name and address of the firm making the discharge;

(B) Texas Water Commission permit number;

(C) list of parameters for which alternate procedures are being requested;

(D) copy of the method of the alternate procedures; and

(E) the justification for the alternate test procedures.

(3) Additional information such as the comparability of data may also be requested by the executive director or his designee.

(b) In no instance shall a permittee use procedures not included in the references cited in §319.11 of this title (relating to Alternate Sampling and Laboratory Testing Methods) until written approval to do so has been received from the executive director or his or her designee. For Texas pollutant discharge elimination system (TPDES) permits a permittee shall only use procedures included in the references cited in §319.11 of this title unless other test procedures have been specified in the permit.

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